June 13, 2016

ATTENTION Ash Kumar, Environment Canada, Great Lakes Executive Committee Co-Chairs

REGION Great Lakes and St. Lawrence River Basin

COMMENTS PROGRESS REPORT OF THE PARTIES, MAY 25 2016 PRELIMINARY DRAFT

PREPARED BY Catherine Masson, Consultant, masson 5@sympatico.ca, 416.422.2608

The draft note is submitted for consideration by the Great Lakes Executive Committee Co-chairs, members, observers and agency staff. It traces the development of six action terms through successive iterations of the Water Quality Agreement, leading to the 2012 Agreement. Each verb carries a unique set of associations and attributions, which describe and demonstrate in present context, how Parties' actions taken both domestically and binationally might be documented in a fulsome, yet concise manner in the draft Progress Report of the Parties (PROP).

This submission is prompted by comments made at the December 2015 Toronto GLEC meeting by the former U.S.EPA Co-Chair, who indicated at several points that the two Parties would remain within the "four corners of the agreement." In lieu of further explanation, I initially assumed an intuitive understanding what these corners were, but later failed to find clarity or supporting documentation. Great Lakes colleagues were also at a loss. It seems there is actually is no real set of GLWQA 2012 'corners.' However, one may discern where exactly 'action terms' do occur in the agreement, how they are applied, and why these six terms in particular indicate Parties' actions and accountability over time. The six terms in this reading of the Agreement are: restore, maintain, protect, enhance, prevent, and priority.

Preamble Line 2 of the Great Lakes Water Quality Protocol of 2012, states that the Parties are, "REAFFIRMING their determination to protect, restore, and enhance water quality of the Waters of the Great Lakes and their intention to prevent further pollution and degradation of the Great Lakes Basin Ecosystem." ARTICLE 2 states that:

- 1. The purpose of this Agreement is to restore and maintain the chemical, physical, and biological integrity of the Waters of the Great Lakes. ...
- 3. The Parties recognize that it is necessary to take action to resolve existing environmental problems, as well as to anticipate and prevent environmental problems, by implementing measures that are sufficiently protective to achieve the purpose of this Agreement.

ARTICLE 5 (c) states, "the Parties shall establish, in consultation with the Great Lakes Executive Committee, binational priorities for science and action to address current and future threats to the quality of the Water of the Great Lakes;" and that (d) "the Parties shall establish priorities, in consultation with the Great Lakes Executive Committee, for each Annex sub-committee to ensure the effective implementation of this Agreement. The Parties shall regularly update those priorities."

During the recent June 2016 Chicago GLEC meeting, members raised concerns about public engagement and outreach, given the upcoming October Public Forum. These included appropriate timeframes, e.g., 3-year triennial cycle or 30-years until next the amendment. How best to pass the torch to the next generation? How to generate sustained public interest and action? Strongly suggest a more substantive timeline for public learning and knowledge. For example, all six action terms appear in successive iterations, (with the exception of the 1983 Annex 3 Phosphorus Load Reduction Supplement to the 1978 Agreement.) Like a compass, they consistently point to Parties' actions over the last over the last 44 years. Table 1. traces their Agreement articulation through time.

Table 1. Action term usage by GLWQA version

Term	Restore	Maintain	Protect	Enhance	Prevent	Priorities
GLWQA Version						
April 15, 1972 [1]	Preamble Annexes 1, 2	Articles III,V Annexes 5, 8	Articles I, V Annex 1	Preamble Article VI Annex 2	Preamble Annexes 1, 2	Annex 5
November 22, 1978 [2]	Preamble Article II Annex 3	Articles II, IV Annexes 1, 3, 6, 7, 9, 10 TOR 3. IJC GLRO	Articles I, IV Annexes 1, 2, 12	Preamble	Articles IV, VI Annexes 1, 3, 4, 6, 8, 11, 12	Articles V, VI Annexes 10, 12
October 16, 1983 Annex 3[3]	none	Phosphorus Target Loads	none	none	none	Programs and Other Measures
November 18, 1987 [4]	Preamble Article II Annexes 2, 3, 17	Annexes 2, 3, 6, 7, 8, 9, 10, 11, 12, 14 TOR 3. IJC GLRO	Articles I, IV, VI Annexes 1, 2, 12, 15	Preamble Annexes 13, 17	Preamble Articles IV, VI Annexes 1, 3, 4, 6, 8, 11, 12	Articles V, VI Annexes 3, 10, 12, 13
September 7, 2012 [5]	Preamble Articles 2, 4, 7 Annexes 1, 2, 7, 10	Article 2 Annexes 3, 4, 5,	Preamble Articles 1, 2, 4, 7 Annexes 2, 3, 5, 6, 7, 8, 10	Preamble Article 2 Annexes 7, 9, 10	Preamble Articles 2, 4, 6, 8 Annexes 2, 3, 4, 5, 6, 7 Article 2 'Precaution'	Articles 4, 5, 6 Annexes 2, 3, 4, 6, 7, 8, 10

Science-based priority-setting is key to Agreement success, but priorities only indicate part of the Parties' overall progress story. The public needs to know why, who, how, what, when and where did restoration, maintenance, protection, enhancement, prevention (and precautionary) actions take place? What were the results and next steps? How do GLWQA 2012 actions link to past Agreements and legacy commitments? Table 2. locates action terms by Preamble, Article and Annex in the 2012 Agreement.

Table 2. Action term usage in GLWQA 2012

Term	Restore	Maintain	Protect	Enhance	Prevent	Priorities
Section						
PREAMBLE	water quality, ecological health, Waters of the Great Lakes, ecosystem approach,	water quality, ecological health, Waters of the Great Lakes, ecosystem approach,	water quality, ecological health, Waters of the Great Lakes, nearshore	water quality, ecological health, Waters of the Great Lakes, ecosystem approach	emerging threats, pollution and degradation, Great Lakes Basin Ecosystem	none
ADTICL FO	nearshore	nearshore				
ARTICLES						
1 Definitions	none	none	(b) "General Objectives"	none	none	none
2 Purpose, Principles and Approaches	integrity 4. (n) tributary management	integrity 1. integrity 4. (d) antidegradation (n) tributary management	3. sufficiently, measures	4. (m) sustainability	3. anticipate emerging problems 4. (i) degradation (j) threats, reduce risks	none
3 General and Specific	none	B. 2 (a) water	none	none	none	none

Objectives						
4 Implementation	2. (c) conservation (i) habitat	none	2. (c) conservation (i) habitat (ii) species	none	2. (a) programs (v) vessel discharges (b) (i) aquatic invasive species	2. (a) (vii) identify other environmental priorities
5 Consultation, Management and Review	none	none	none	none	none	1. (a) future actions (c) threats (d) annexes and updates
6 Notification and Response	none	none	none	none	Incidents and threats	none
7 The International Joint Commission	1. (g) consulting (h) engaging	none	1. (g) consulting (h) engaging 6. consent	none	none	1. (c) (iv) research and monitoring
8 Commission Boards and Regional Office	none	none	none	none	3. WQB (b) identifying, recommending	none
ARTICLES 9-13	none	none	none	none	none	none
ANNEXES						
1 Areas Of Concern	A. beneficial uses B. 2. criteria 5. confirm AOC in Recovery, RAP criteria	none	none	none	none	none
2 Lakewide Management	Restore 7. integrated nearshore framework 5. (e) measures (f) strategies	none	7. integrated nearshore framework 5. (e) measures (f) strategies	none	7. integrated nearshore framework 5. (e) measures (f) strategies	3. science 4. activities 5. actions 7. integrated nearshore framework 5. (e) measures
3 Chemicals of Mutual Concern	none	B. 1. standards 4. biological and sediment banks	A. Purpose human health and the environment B. 1. quality	none	B. 1. strategies 6. monitoring and evaluating	6. review needs
4 Nutrients	none	B. Lake Ecosystem Objectives 2. nuisance algae 3. algal species 4. cyanobacteria 5. L. Superior, Michigan, Huron, Ontario 6. L. Erie	none	none	none	C. Substance Objectives 2. (b) P load reductions 7. nutrients
5 Discharges From Vessels	none	Reception facilities, review	A. Purpose B. 1. quality 2. requirements, practices, safety		A. Purpose 1. (c) programs and measures 4. Biofouling	none

6 Aquatic Invasive	none	none	6. Ballast Water (a) discharge (iii) alternative Technologies, approaches B. 1. Ballast	none	5. Antifouling Systems Reception facilities 2. review 8. Conventions A. Purpose	3. (b) locations
Species 7 Habitat And Species	A. Purpose resilience, ecosystem services B. 2. lakewide adaptive management 3. assess gaps 4. degraded habitat 5. net habitat gain 6. native species, coordination	3. assess gaps 5. net habitat gain 6. native species	Water A. Purpose resilience, ecosystem services B. 2. lakewide adaptive management 3. assess gaps 5. net habitat gain 6. native species, coordination	A. Purpose resilience, ecosystem services B. 2. strategies 3. assess gaps 5. net habitat gain 6. native species	C. cooperation, climate change, other stressors	B. 3. binational framework
8 Groundwater	none	none	B. 2. "General Objectives" 3. coordinate C. 3. assess gaps	none	none	B. 2. identify
9 Climate Change Impacts	none	none		C. 3. monitoring, validate	none	none
10 Science	4. integrity, General and Specific Objectives	none	4. integrity, General and Specific Objectives	A. Purpose coordination, integration, synthesis, assessment	none	C. Priority- Setting 1. issues 2. IJC advice 3. research funding E. Lake-specific

What follows is a draft crosswalk designed to link action terms with Parties' intentions and actions. With apologies, it is submitted incomplete due to the extensive number of document requiring compilation, respecting the tight timeline for GLEC members and observers to provide comments in advance of Co-chair review.

Table 3. Corresponding actions taken by the Parties as reported in the PROP (draft)

Term	Restore	Maintain	Protect	Enhance	Prevent	Priorities
PROP section						
ANNEXES				Total Comment		
1 Areas Of Concern	A. beneficial uses B. 2. criteria 5. confirm AOC in Recovery, RAP criteria	none	none	none	none	none
2 Lakewide	- May 13, 2016,					- Cooperative
Management	Canada and U.S. issue draft					Science and Monitoring

	Nearshore					Initiative (CSMI)
	Framework for public comment - Biodiversity Conservation Strategies developed February 12,					
2.01 1 1 024 1	2015	D 1 1 1	4 5		D 1	
3 Chemicals of Mutual Concern		B. 1. standards	A. Purpose human health and the environment B. 1. quality	none	B. 1. strategies 6. monitoring and evaluating	6. review needs
3 Not indicated in		4. biological and				
PROP		sediment banks				
4 Nutrients						
5 Discharges From						
Vessels						
6 Aquatic Invasive Species						
7 Habitat And Species	Lake Michigan: Lake Herring Restoration	Lake Ontario: Bloater Fish Stocking	Lake Erie: Western Basin Conservation Vision	Lake Huron: Healthy Lake Huron	Lake Superior: Superior Streams	
8 Groundwater						
9 Climate Change						
Impacts						
10 Science						

Suggest revising 'Figure 1 – The history of the Great Lakes Water Quality Agreement,' April 15, 1972 entry for accuracy based upon the original Preamble, e.g., "The 1972 GLWQA committed Canada and the U.S to restore and enhance water quality in the Great Lakes System, adopt common objectives, develop and implement cooperative programs and assign special responsibilities and functions to the International Joint Commission."

Also, what exactly is the Parties' adaptive management story? For example, Annex 3 calls for accountable, adaptive, science-based adaptive management approaches, but these are absent in the PROP.

Finally, I would urge the Agreement and Annex Co-leads to be less concerned about overall length, which seems a major preoccupation.

This is but one piece of the overall reporting puzzle. Please know that these draft comments were prepared in some haste. Happy to clarify or elaborate if required.

Submitted for consideration,

Catherine Masson

References

- [1] United States and Canada Great Lakes Water Quality Agreement with Annexes and Texts and Terms of Reference, Signed at Ottawa on April 15, 1972, Entered into force April 15, 1972, URL: http://ijc.org/files/publications/C23.pdf; https://treaties.un.org/doc/Publication/UNTS/Volume%20837/volume837-I-11982-English.pdf
- [2] Agreement, with Annexes and Terms of Reference, between the United States and Canada, Signed at Ottawa November 22, 1978, URL: https://treaties.un.org/doc/publication/unts/volume%201153/volume-1153-i-18177-english.pdf
- [3] Phosphorus Load Reduction Supplement to Annex 3 of the 1978 Agreement between Canada and the United States of America on Great Lakes Water Quality, Signed at Halifax, Canada on 16 October 1983, URL: https://treaties.un.org/doc/Publication/UNTS/Volume%201468/volume-1468-I-18177-English.pdf
- [4] Revised Great Lakes Water Quality Agreement of 1978: Agreement, with Annexes and Terms of Reference, between the United States and Canada, Signed at Ottawa November 22, 1978 and Phosphorus Load Reduction Supplement, Signed October 16, 1983, As amended by Protocol signed November 18, 1987, URL: http://www.ijc.org/files/tinymce/uploaded/GLWQA_e.pdf http://agrienvarchive.ca/download/GLWQ_agreement_revised_78.pdf
- [5] Protocol Amending the Agreement between Canada and the United States of America on Great Lakes Water Quality, 1978, as Amended on October 16, 1983 and on November 18, 1987, Signed September 7, 2012, Entered into force February 12, 2013. 'This Protocol shall be referred to as the Great Lakes Water Quality Protocol of 2012,' URL: https://binational.net//wp-content/uploads/2014/05/1094_Canada-USA-GLWQA-e.pdf; http://www.ijc.org/en_/Great_Lakes_Water_Quality